

IN THE CLAIMS:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. When strikethrough cannot easily be perceived, or when five or fewer characters are deleted, [[double brackets]] are used to show the deletion. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 6, 10, 14, and 18 in accordance with the following:

1. (Currently amended) An apparatus to determine an area of an optical disc efficiently, comprising:
 - a pickup that reads/records a signal from/to the optical disc;
 - a spindle motor that revolves the optical disc; and
 - a controller that determines whether current time information of the pickup is greater than or equal to 95 minutes,
 - where current time information is less than or equal to 95 minutes, determines a logical block address of the pickup, and
 - where current time information is greater than 95 minutes,
 - counts a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of the pickup,
 - compares the number of counted ATIP syncs with a reference number of ATIP syncs, and
 - where the number of ATIP syncs is less than or equal to the reference number of ATIP syncs, determines that the pickup is in a lead-in area, and
 - where the number of ATIP syncs is greater than the reference number of ATIP syncs, determines the logical block address ~~the current position~~ of the pickup ~~based on a comparison result, when ATIP sync information read by the pickup indicates that the pickup is present in an area of the optical disk that is greater than or equal to 95 minutes,~~
 - wherein the optical disc has an absolute time of 99 minutes, and
 - wherein the controller comprises:
 - a memory that stores a reference number of ATIP syncs for each track of the optical disc;
 - a counter that counts the number of ATIP syncs for each track at the current position of the pickup; and
 - a location determination unit that compares the number of counted ATIP syncs with the reference number of ATIP syncs and determines the ~~current position~~ logical block

address of the pickup to reduce access time based on the comparison result,

~~wherein the location determination unit determines that the pickup is present in a lead-in area when the number of counted ATIP syncs is less than the reference number of ATIP syncs.~~

2. (Original) The apparatus of claim 1, wherein an ATIP sync is output for a block of data that is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

3. (Cancelled)

4. (Canceled)

5. (Previously presented) The apparatus of claim 1, wherein the location determination unit determines that the pickup is present in an area other than a lead-in area when the number of counted ATIP syncs is greater than the reference number of ATIP syncs.

6. (Currently amended) A method of determining an area of an optical disc efficiently, comprising:

determining whether current time information of the pickup is greater than or equal to 95 minutes, and

where the current time information is less than or equal to 95 minutes,
determining a logical block address of the pickup and

where the current time information is greater than 95 minutes,

counting a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of a pickup; ~~when ATIP sync information recorded on the optical disc indicates that the pickup is currently present in an area of the optical disc that is greater than or equal to 95 minutes; and~~

~~determining the current position of the pickup by comparing the number of counted ATIP syncs with a reference number of ATIP syncs,~~

~~wherein the optical disc has an absolute time of 99 minutes,~~

storing, in a memory, the reference number of ATIP syncs for each track of the optical disc,

counting, by a counter, the number of ATIP syncs for each track at the current position of the pickup, and

comparing, by a location determination unit, the number of counted ATIP syncs with the reference number of ATIP syncs and

where the number of ATIP syncs is less than or equal to the reference number, determining that the pickup is in a lead-in area, and

where the number of ATIP syncs is greater than the reference number, determining the logical block address of the pickup to reduce access time

~~determining the current position of the pickup based on the comparison result,~~

~~wherein during the determining of the current position of the pickup, the pickup is determined to be present in a lead-in area when the number of counted ATIP syncs is less than the reference number of ATIP syncs.~~

7. (Original) The method of claim 6, wherein an ATIP sync is output for a block of data which is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

8. (Canceled)

9. (Original) The method of claim 6, wherein during the determining of the current position of the pickup, the pickup is determined to be present in an area other than a lead-in area when the number of counted ATIP syncs is greater than the reference number of ATIP syncs.

10. (Currently amended) A controller to determine a ~~position~~logical block address of a pickup of an optical disc, comprising:

a memory that stores a reference number of an absolute time-code in pre-groove (ATIP) syncs for each track of the optical disc;

a counter, coupled to the memory, that determines whether current time information of the pickup is greater than or equal to 95 minutes, and

where the current time information is less than or equal to 95 minutes, determines a logical block address of the pickup and

where the current time information is greater than 95 minutes,

counts a number of ATIP syncs for one rotation of the optical disk at a current location of the pickup to provide a counted number of ATIP syncs; and

a location determination unit, coupled to the counter and the memory, that compares the counted number of ATIP syncs with the reference number of ATIP syncs stored in the memory for each track and

where the number of ATIP syncs is less than or equal to the

reference number, determines that the pickup is in a lead-in area, and

where the number of ATIP syncs is greater than the reference number, determines the logical block address of the pickup to reduce access time

~~determines a current position of the pickup based on a comparison result,~~

~~wherein the optical disc has an absolute time of 99 minutes, and~~

~~wherein during determining of the current position of the pickup, the pickup is determined to be present in a lead-in area when the counted number of ATIP syncs is less than the reference number of ATIP syncs.~~

11. (Original) The controller of claim 10, wherein an ATIP sync is output for a block of data which is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

12. (Canceled)

13. (Original) The controller of claim 10, wherein during determining of the current position of the pickup, the pickup is determined to be present in an area other than a lead-in area when the counted number of ATIP syncs is greater than the reference number of ATIP syncs.

14. (Currently amended) A computer-readable medium having computer-executable instructions stored thereon to determine a ~~position~~logical block address of a pickup of an optical disc efficiently, wherein the computer-executable instructions include:

determining whether current time information of the pickup is greater than or equal to 95 minutes;

where current time information is less than or equal to 95 minutes, determining a logical block address of the pickup; and

where current time information is greater than 95 minutes;

storing a reference number of an absolute time-code in pre-groove (ATIP) syncs for each track of the optical disc;

counting a number of ATIP syncs for one rotation of the optical disk at a current location of a pickup to provide a counted number of ATIP syncs;

comparing the counted number of ATIP syncs with the reference number of ATIP syncs stored in the memory for each track and

where the number of ATIP syncs is less than or equal to the reference number, determining that the pickup is in a lead-in area, and

where the number of ATIP syncs is greater than the reference number,
determining the logical block address of the pickup to reduce access time
~~to determine a comparison result; and~~
~~determining a current position of the pickup based on the comparison result,~~
~~wherein the optical disc has an absolute time of 99 minutes, and~~
~~wherein during determining of the current position of the pickup, the pickup is determined~~
~~to be present in a lead-in area when the counted number of ATIP syncs is less than the~~
~~reference number of ATIP syncs.~~

15. (Original) The computer-readable medium of claim 14, wherein an ATIP sync is output for a block of data which is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

16. (Canceled)

17. (Original) The computer-readable medium of claim 14, wherein during determining of the current position of the pickup, the pickup is determined to be present in an area other than a lead-in area when the counted number of ATIP syncs is greater than the reference number of ATIP syncs.

18. (Currently amended) An apparatus to determine an area of an optical disc efficiently, comprising:
 a pickup that reads/records a signal from/to the optical disc; and
 a controller that determines whether current time information of the pickup is greater than or equal to 95 minutes, and
where the current time information is less than or equal to 95 minutes, determines
a logical block address of the pickup and
where the current time information is greater than 95 minutes,
 counts a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of the pickup, compares the number of counted ATIP syncs with a reference number of ATIP syncs, and
where the number of ATIP syncs is less than or equal to the reference number,
determines that the pickup is in a lead-in area, and
where the number of ATIP syncs is greater than the reference number,
determines the logical block address of the pickup to reduce access time,
~~determines the current position of the pickup based on a comparison result, when ATIP sync~~

~~information read by the pickup indicates that the pickup is present in an area of the optical disk that is greater than or equal to 95 minutes,~~

wherein the optical disc has an absolute time of 99 minutes, and

wherein the controller comprises:

a memory that stores a reference number of ATIP syncs for each track of the optical disc;

a counter that counts the number of ATIP syncs for each track at the current position of the pickup; and

a location determination unit that compares the number of counted ATIP syncs with the reference number of ATIP syncs and determines the ~~current position~~logical block address of the pickup ~~based on the comparison result,~~

~~wherein the location determination unit determines that the pickup is present in a lead-in area when the number of counted ATIP syncs is less than the reference number of ATIP syncs.~~